CITY OF SANTEE

REQUEST FOR PROPOSAL
FOR
DRY WEATHER ANALYTICAL & FIELD SCREEN MONITORING PROGRAM

The City of Santee (City) is seeking proposals to conduct its 2010 Dry Weather Analytical and Field Screening Monitoring Program as required under the municipal stormwater permit (Order R9-2007-0001) and as described in the City's Jurisdictional Urban Runoff Management Plan (JURMP), Section 9.0, Map 1 and Appendix E.

PROPOSAL CONTENTS

Consultants interested in providing these services should submit three copies of a Proposal containing the items described in the Proposal Contents section, including the following:

- Proposal
- Qualifications
- References

Please submit your proposal by April 5, 2010 at 5:00p.m.

If you have questions regarding this project, please contact Helen Perry at (619) 258-4100 x 177.

Submit Statement of Qualifications to:

City of Santee
Helen Perry
Storm Water Program Manager
10601 Magnolia Avenue
Santee, CA 92071

PROJECT BACKGROUND

In accordance with Order R9-2007-0001, the City is required to develop and implement a dry weather field screening monitoring program to detect and eliminate illicit connections and illegal discharges to the City's Municipal Separate Storm Sewer System (MS4) through monitoring and follow-up investigations. The City desires to retain the services of a qualified consultant to implement this program in accordance with the requirements described in Order R9-2007-0001 and the City's JURMP (JURMP available at www.ci.santee.ca.us).

Over the past decade, the City has sampled dry weather monitoring locations and conducted follow-up investigations based on requirements of Order 2001-01. There are currently 20 primary monitoring sites, and up to eight alternative monitoring locations. Two rounds of monitoring, the first in May to early June, and the second during September are required. The dry weather targeted sampling component for the Municipal Separate Storm Sewer System (MS4) Outfall Regional Monitoring study will also be incorporated into the May dry weather sampling event.

In addition to permit-mandated monitoring, the City of Santee conducts an additional study of the receiving waters within its jurisdiction. Five locations are sampled (see Map 1 of the JURMP). Three are on our jurisdictional boundaries (San Diego Upstream, Forester Creek Upstream, San Diego Downstream); one is where the Sycamore Creek Downstream confluences with San Diego River; the fifth is where the Forester Creek confluences with San Diego River. Starting in 2010, this additional study (but not the dry weather monitoring/MS4 outfall component) will be Surface Water Ambient Monitoring Program (SWAMP)-compliant.

SCOPE OF SERVICES

The Consultant shall conduct a Dry Weather Field Screening and Analytical Monitoring Program for the City of Santee in accordance with the JURMP, Order R9-2007-0001, the targeted dry weather MS4 outfall monitoring and an additional study compliant with SWAMP procedures.

Two rounds of field screening will be conducted during the dry weather period of 2010. The first round will take place at the beginning of the dry weather period and will incorporate the MS4 outfall monitoring component; the second round will be performed toward the end of the dry weather period in September 2010. The consultant's proposal shall include the following scope of work:

Task 1. Selection of Field Screening Sites

The City of Santee has identified 20 primary monitoring stations where data will be collected during the dry weather analytical and field screening monitoring program. Additional alternative stations have been identified that will be monitored if any of the primary stations exhibit no flow or ponded water. The list of the above sites is included in the City of Santee Jurisdictional Urban Runoff Management Program (JURMP). Additional sites can be made available on request.

Task 2. Field Screening

Task 2-1 Visual Observations. At each site, visual observations will be recorded. Visual observations include looking for evidence of dry weather flows such as staining, corrosion, sediment, surrounding vegetation, algae, mosquito larvae, insects, rodents, and other animals in the vicinity of the outfall. At each site, a standard dry weather field screening data sheet will be filled. Photograph(s) of each outfall will also be taken.

Task 2-2 Field Tests. The outfalls will be checked for the presence of flow. If no flow is observed, an alternative site with ponded or flowing water will be selected. At each site the flow and its temperature will be measured, and a sample will be taken for field analyses. A field test kit (such as CHEMetrics) will be used to test for the following parameters:

- pH
- Temperature
- Specific Conductance
- Turbidity
- Ammonia-Nitrogen
- Nitrate-Nitrogen
- Orthophosphate-Phosphorus
- Surfactants (MBAS)

Task 2-3 Trash Assessments. Trash assessments will be performed at all 20 sites identified for dry weather monitoring. The assessment will be conducted concurrently with rounds of monitoring and will be performed in accordance with the protocol developed by the Dry Weather Workgroup, and consistent with previous rounds of Trash Assessments. The results of the assessments will be incorporated in the final report. This trash assessment data will be converted into the regionally accepted data sharing format produced in late 2008.

Task 3. Analytical Monitoring

Water samples from 25 percent of the sites (five sites) where ponded or flowing water is observed, will be collected and submitted to a California Department of Health Services certified laboratory for analysis of the following constituents:

- Total Hardness
- Oil and Grease
- Diazinon and Chlorpyrifos
- Cadmium (Dissolved)
- Copper (Dissolved)
- Lead (Dissolved)
- Zinc (Dissolved)
- *Enterococcus* bacteria
- Total Coliform bacteria
- Fecal Coliform bacteria

Task 4. Data Evaluation

The collected data will be evaluated to identify possible areas of non-storm water flows throughout the City. The data will also be correlated with the results of Task 3 to identify areas and sources of pollutants, and the evaluation will incorporate consideration of historical data. Considering the results of the evaluation, recommendations for future actions will be made.

Task 5. Source Identification Investigations

Based on dry weather field screening and laboratory analytical results, follow-up investigations may be necessary to identify and eliminate pollutant sources. In order to determine whether a source investigation is necessary, the following three methods will be employed:

(1) Numeric action levels

(2) California Toxics Rule

(3) Best professional judgment

Numeric action levels

Numeric action levels are used as the primary approach for interpreting pH, orthophosphate-phosphorous, nitrate-nitrogen, ammonia-nitrogen, surfactants (MBAS), oil and grease, diazinon, chlorpyrifos, total coliform, fecal coliform, and *Enterococcus* analytical results. If any of these constituents exceed numeric action levels approved by the San Diego Copermittee Dry Weather Workgroup, then a source investigation will be conducted.

California Toxics Rule

The California Toxics Rule determines the action level for dissolved metals such as cadmium, copper, lead, and zinc. The California Toxics Rule provides benchmarks for dissolved metals concentration based on the hardness of sampled water. If the laboratory analytical results exceed the action level, then a source investigation will be conducted.

Best professional judgment

Best professional judgment is utilized as the primary approach for conductivity, temperature, and turbidity. It is the secondary approach for interpreting the results of all other analyses. Best professional judgment may indicate that results that exceed action levels may be the result of natural or background factors.

Follow-up visits will be made for sites where the results of the field and laboratory analytical samples exceed an action level.

1. Immediate source identification investigations will be conducted if visual and/or analytical evidence of gross contamination is present at a site (e.g., substantial petroleum sheen, extremely high ammonia concentration, evidence of a sewage release).
2. If field results exceed an action level, the follow-up will be conducted within two business days of recording the test results in the field.
3. If the results of the laboratory samples exceed the action levels, then follow-up pollutant source investigations will be conducted within two business days of receiving the analytical results.

Each follow-up source investigation will include recording visual observations at the site; measuring physical parameters such as water flow, temperature, pH, and conductivity; and collecting water samples for analysis. Field personnel will also perform visual surveys and sampling of the area and storm water drainage system upstream of the site to determine potential sources of the pollutant(s) exceeding the action level. The City will be promptly notified of any maintenance items or potential illicit discharges or illicit connections that require immediate attention.

For bacteria source investigation, a more stepwise approach to upstream investigations will be used. Samples for bacteria testing will be collected at the upstream locations with flowing and ponded water where there is a possibility of exposure to sources of bacteria. The collected samples will be sent to the laboratory to be analyzed for bacteria. After receiving the lab results, depending on the bacteria results, further investigations may be required.

Task 6. Preparation of a Summary and Final Reports

Within four weeks after completion of Round One of sampling, a brief report will be sent to the City. This report will include a summary of the data from Round One and interim recommendations for City's actions during the summer of 2010.

At the conclusion of the program, a report will be prepared to summarize the observations and the results of the entire study. The report will include an interpretation of the field and laboratory data and test results as to the possible presence of illicit connections/illegal discharges. There will also be an assessment of historical trends in the data.

The City will be provided with all original data, records of dry weather screenings, laboratory analyses, and photographs. The report will be organized into an introduction, sampling locations, field and laboratory analytical methods including quality assurance/quality control (QA/QC), field screening results, laboratory analytical results, data analysis, follow-up investigation results, and summary and conclusions. Appendices will be for historical dry weather data, selected site photographs, laboratory analysis, and field data sheets.

Hard copies and electronic copies of the report will be submitted to the City. A draft report will be submitted by November 1, 2010 for review. After approximately one week the City will provide comments on the report. If substantive changes are required, then additional review will be required. The report will be completed and provided to the City for submission to the RWQCB by **December 6, 2010. Three paper copies of the Dry Weather Monitoring report and an electronic copy of the files used in the report** (with the original files, not PDF) will be provided to the City.

All the dry weather monitoring data is collected by the Copermittees into one regional database. The County requires that each Jurisdiction converts its dry weather monitoring data into a standard format so that it can be easily uploaded into the regional database. The process involves converting the data from tables designed for ease of reading and reference to more duplicative tables that are designed to allow for more efficient data analysis using the regional database. The consultant will provide the City with the data for 2010 in the standard regional format.

The Additional Study will be provided in the following form: Two paper copies; data in the datasharing format (for datasharing at a regional level); and an electronic copy.

Task 7. Municipal Separate Storm Sewer System (MS4) Outfall Monitoring Program

In accordance the new Municipal Permit, the regional Copermittee MS4 Outfall Monitoring Workplan has identified sites G30c, O40b, S5c, and U10a in the City Santee for one round of MS4 monitoring. The constituents to be tested by the County at each site are:

- Bacteria
  - Total Coliforms
  - Fecal Coliforms
  - *Enterococcus*
- Total Dissolved Solids (TDS)
- Total Suspended Solids (TSS)
- Total Nitrogen
- Total Phosphorus
- Dissolved Oxygen

In addition to the above constituents, sites G30c and U10a require pH readings, which will

already be provided through Task 2-2. Sampling of site V45k should be performed in the event that one of the selected sites does not have sufficient flow for collecting water samples. If more alternative sites are needed, dry weather analytical monitoring sites P20f and RCP1 may also be used.

Visits for dry weather and MS4 monitoring will typically be performed concurrently, reducing the cost of labor. MS4 monitoring data will be compiled and presented to the City in the standard datasharing format (excel spreadsheet). The data will not be included in the dry weather report but will be transmitted to the City by July 15, 2010 to allow it to be reviewed and forwarded on by the City by the County-mandated deadline (approximately August 1, 2010).

Task 8. Preparation of Quality Assurance and Quality Control Project Plan (QAPP)

A QAPP will be prepared for the Water Quality of the Major Receiving Water Bodies component (Task 9) of the scope of services. The QAPP will be provided to ensure that the additional study is SWAMP-compliant. It is envisioned that this QAPP will be used, with possible minor updates during subsequent years, therefore both paper and electronic copies of the QAPP will be provided to the City.

Task 9. Water Quality of the Major Receiving Water Bodies

An additional study will be conducted to evaluate the water quality impacts of the non-storm water discharged thorough the City outfalls to the San Diego River, Sycamore Creek, and Forester Creek. The objective of the additional study will be to assess the water quality changes in the river and creeks as a result of flowing through an urbanized area in the City of Santee. This study will be SWAMP-compliant.

The selected locations will include:

- Upstream of the San Diego River, approximately 200 feet downstream of Riverford Road Bridge.
- Downstream of the San Diego River, at West Hill Parkway Bridge
- Upstream of Forester Creek, at Prospect Avenue at the bridge west of Cuyamaca Street
- Downstream of Forester Creek, approximately 200 feet north of Mission Gorge Road, across Fanita Drive
- Downstream of Sycamore Creek, at Carlton Oaks Drive

At each selected site, water will be tested for the following constituents relevant to the City's San Diego River Watershed program:

- *Enterococcus* bacteria
- Total Coliform bacteria
- Fecal Coliform bacteria
- Total and dissolved Selenium
- Total Phosphorus
- Orthophosphate-Phosphorus
- Total Nitrogen
- Total Dissolved Solids
- Dissolved Oxygen
- Hardness
- Temperature

- Conductivity
- pH
- Toxicity (optional Task 9b, please provide a cost per sample)

Dissolved oxygen, temperature, conductivity, and pH will be tested in the field, and the remaining constituents will be sent to the laboratory for analyses. The receiving water quality data will be summarized in a report at the conclusion of the program.

Proposal Requirements

Please include the following in your proposal:

- Identify a qualified Project Manager who will coordinate the field efforts and serve as the City's principal point of contact. Identify field staff to conduct the dry-weather field-screening program.
- Provide a brief description of recent qualifications and experience that demonstrate the ability to perform successfully on this contract.
- Include a description of any other subconsultants, including analytical laboratories, who are included on the project team, their role on the project, and qualifications to provide the requested services.
- All laboratory samples must be analyzed by a laboratory with current accreditation by the California Department of Health Services Environmental Laboratory Accreditation Program and hold certifications for the required laboratory analyses.
- Provide a description, broken down by key tasks, of your approach to completing the services required under the permit. Describe any innovative techniques, streamlined methods, or optional services that your team will offer the City to perform the work.
- Provide a description of the approach and general procedures to be used to follow-up on exceedances identified during the field screening. This should also include procedures to conduct immediate follow-up investigations by consultant should field observations, identify an illicit discharge or connection currently causing elevated levels of measured or observed constituents. Include notification procedures to the City should immediate enforcement be required by City staff.
- The proposal should include a schedule for performing the tasks described in the project approach.
- Three references from recent clients confirming that similar work has been complete in a satisfactory manner.
- The proposal shall include a cost table indicating the labor hours and total cost by task to perform the scope of services.

Proposal Evaluations

The selection of the consultant will be based upon an analysis of the demonstrated competence and professional qualifications necessary for the satisfactory performance of the service required, as well as the cost of the service. The City will evaluate proposals to select the most qualified consultant, with whom the City will enter negotiations to develop a scope of work and fee acceptable to both parties. Proposals received will be reviewed and evaluated according to:

- Understanding of the project;
- Experience and expertise in the field;
- Ability to meet project deadlines;
- Past performance on similar projects; and

- Overall cost of the service

If the City cannot reach agreement with the highest-ranked consultant, negotiations with that consultant will be terminated and the City will enter negotiations with other consultants, in order of their ranking, until an agreement is reached.

The City shall not be obligated to respond to any proposal submitted, nor shall it be legally bound in any manner by the submission of a proposal. An agreement shall not be binding or valid against the City unless or until it is executed by the City and the proponent. The City reserves the right to select the successful proposal and negotiate an agreement as to the scope of services, the schedule for performance and duration of the services with the proponent whose proposal is most responsive to the needs of the City. The City reserves the right to reject any and all proposals, or portions thereof, received in response to the RFP or to negotiate separately with any source whatsoever, in any manner necessary, to serve the best interests of the City. Additionally, the City may, for any reason, decide not to award an agreement as a result of this RFP. Non-acceptance of any proposal shall not imply that the proposal was deficient. Rather, non-acceptance of any proposal will mean that another proposal was deemed to be more advantageous to the City or that the City decided not to award an agreement as a result of this RFP.

Reference Material Available for Review

The following items are available for review in Building #4, Santee City Hall, located at 10601 Magnolia Avenue, Santee, CA 92071, and on our City website www.ci.santee.ca.us.

- Table of Dry Weather Monitoring Locations
- Map of Dry Weather Monitoring and Additional Study Locations
- Dry Weather Monitoring Fieldsheet
- Trash Assessment Worksheet
- Standard Professional Services Agreement
- Copy of 2009 Dry Weather Monitoring Report